

Madison County Council of Governments (MCCOG)



Request for Qualifications

2008 Planimetric, Topographic and Digital Orthoimagery Update Project

RFQ Posting Date: January 4, 2008
RFQ Closing Date and Time: 4:00 pm, January 25, 2008

WARNING: Prospective proposers who have received this document from a source other than the issuing office should immediately contact MCCOG and provide their names and mailing addresses in order that addendum to the RFQ or other communication can be sent to them. Any prospective proposers who do not provide MCCOG with this information assume complete responsibility in the event they do not receive communication from MCCOG after the RFQ posting and closing dates.

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Section 1 - Introduction

The purpose of this Request for Qualifications (RFQ) is to receive proposals for selection of a contractor to provide professional services for the “2008 Planimetric, Topographic, and Digital Orthoimagery Update Project.”

This RFQ does not constitute a contract for services performed or to be performed. This project will include the following key components:

- Aerial Imagery Acquisition
- Ground Control
- Aerial Triangulation
- Planimetric Update
- LiDAR/DTM
- Topographic Update
- Digital Orthophotography

In addition, the following components are requested as possible separate contract options:

- Oblique Aerial View Imagery
- Digital Orthophotography at 1" = 100' scale at 0.25-foot pixel resolution of City of Anderson
- Digital Orthophotography at 1" = 100' scale at 0.25-foot pixel resolution for entire MCCOG MPA

All proposals submitted become the property of MCCOG and will not be returned. MCCOG is not responsible for any costs incurred by the respondent in proposal preparation, presentations, site visits, or benchmarks performed.

Section 2 - Project Overview

Objective: To keep up with growth and the associated public services MCCOG frequently updates its GIS base mapping.

The purpose of this RFQ is to receive qualifications to update existing Planimetric/Topographic and new color digital orthophotography in the year 2008.

2.1) Project Area

The project area includes all of Madison County and several small areas adjacent to Madison County in Delaware, Hancock and Hamilton Counties. This area is known as the MCCOG Metropolitan Planning Area (MPA) Boundary. MCCOG's MPA Boundary along with a 1,000 foot buffer outside the MPA Boundary will serve as the overall project area. In all this area is approximately 517 square miles (See Attachment C).

Section 3 - Proposal Instructions

3.1) Registration

In order to receive addenda, answers to information requests, and other important communications regarding this RFQ, it is imperative you register your receipt of this RFQ by sending the following information to Trent Pell at tpell@mccog.net:

- Name of Firm
- Address
- Contact Name
- Email
- Phone
- Fax

3.2) Submission Instructions

Submit one original (clearly marked “**original**”) and five copies of the proposal in a sealed package to this address:

Attn: Trent Pell, GIS Coordinator
Madison County Council of Governments
16 E. 9th Street Rm 100
Anderson, IN 46016 USA, 46016

Faxed proposals will **not** be considered.

The original proposal must be signed by a person who is authorized to sign contracts for the respondent. The copies of the proposal should show copies of the signature.

The original proposal (and only the original proposal) must also include a digital copy of the proposal in Adobe PDF format on CD-ROM.

Label the outside of the sealed package as follows:

“2008 Planimetric, Topographic and Digital Orthoimagery Update Qualifications”

3.3) Deadline

Proposals must be received at the location stated above no later than the Proposal Due Date shown in the Project Schedule. Proposals received after the deadline will not be accepted.

3.4) Presentations and Site Visits

Any or all respondents may be invited to make a presentation. If so, MCCOG will notify the respondents of the date and time of the presentation. In addition, certain respondents may be asked to participate in one or more site visits by MCCOG representatives to investigate the respondent’s ability to meet the project requirements.

- All costs incurred by the respondent in the presentations or site visits will be the responsibility of the respondent. After any such presentation, visits, or demonstrations, proposals may be evaluated again.

3.5) Project Schedule

MCCOG has established a tentative schedule for proposal submission, review, contractor selection, and project initiation, as follows:

Project Schedule		
Milestone	Date	Time
RFQ Released	January 4, 2008	
Information Requests Deadline	January 18, 2008	12:00 Noon
SOQ Due Date	January 25, 2008	4:00 PM
Oral Presentations (if required)	February 1, 2008	
Contract Selection	February 6, 2008	
Begin Contract Negotiations	February 6, 2008	
Notice to Proceed	February 13, 2008	
Project Completion	December 31, 2008	

3.6) Requirements for Affirmative Action Certification

A completed Affirmative Action Certification form is required for all items that identify a DBE goal. The consultant must identify the DBE firms with which it intends to subcontract. Include the contract participation percentage of each DBE and list what the DBE will be subcontracted to perform on the Affirmative Action Certification Form. **Copies of DBE certifications, as issued by INDOT, for each firm listed are to be included as additional pages after the form.** If the consultant does not meet the DBE goal, the consultant must provide documentations on additional pages that it has made good faith efforts to achieve the DBE goal. Please review the DBE program based on any goals set and complete the DBE Affirmative Action Certification form as applicable. What constitutes good faith efforts is explained in detail within the DBE program information referred to above. If no goal is set then no Affirmative Action Certification form is required. Indiana Department of Transportation's (INDOT) DBE Program Information is available at the Indiana Department of Transportation's website.

A listing of certified DBE's eligible to be considered for selection as prime consultants or sub-consultants for this RFP can be found at the Indiana Department of Transportation's (INDOT) website. (http://www.in.gov/dot/div/legal/DBE/dbe_list.xls)

DBE subcontracting goals apply to all prime submitting consultants, regardless of the prime's status of DBE.

3.7) Proposal Acceptance and Rejection

MCCOG reserves the right to accept any proposal, to reject any or all proposals, to waive irregularities or informalities in any proposal, and to make the award in any manner deemed to be in the best interest of MCCOG.

3.8) Questions

If you have any questions about this RFQ or the proposal procedures, submit them by email or fax by the Information Request Deadline indicated in the Project Schedule. Requests received after this deadline will not be considered. All requests received before the deadline will be answered by MCCOG in an email to all registered recipients of this RFQ. The requestor is responsible for notifying MCCOG of any problem in receiving replies.

Email or fax questions about this RFQ or the proposal procedures to:

Mr. Trent Pell
Madison County Council of Governments
Email: tpell@mccog.net
Fax: 765-641-9486

3.9) Single Point of Contact

Responders should contact Trent Pell and no one else, regarding the status of proposal evaluation. Disregarding this directive may disqualify the responder from further consideration.

Section 4 - Selection Criteria

MCCOG will open and review all technical proposals and select the proposer that demonstrates, in MCCOG's opinion, the highest degree of technical merit. With that proposer, MCCOG will negotiate the technical aspects of the scope of work, deliverables, schedule, and fee. However, if a negotiated agreement can not be reached, MCCOG may open negotiations with the proposer that demonstrates the next highest degree of technical merit and repeat the process. Upon a satisfactory selection and successful negotiations, MCCOG will initiate the contract award.

The following criteria will be used to evaluate proposals. This is not intended to be a comprehensive list, nor is the arrangement of the criteria meant to imply order of importance in the selection process.

4.1) Compliance with RFQ Instructions

The proposals will be evaluated for general compliance with instructions issued in the RFQ. Noncompliance with significant instructions may be grounds for proposal disqualification.

4.2) Technical Expertise

The proposal will be evaluated on the respondent's demonstrated technical suitability for performing the project services.

4.3) Equipment Ownership

MCCOG prefers that the respondents actually own all the equipment and own or license all the software to be used for the project. This preference increases the likelihood that the equipment will be properly calibrated and well maintained.

4.4) Quality Control

The proposal will be evaluated on the basis of the apparent effectiveness of the respondent's proposed quality control program. MCCOG recommends the respondent utilize ISO (International Standards Organization) control standards for this project, preferably possessing a current ISO certification.

4.5) Professional Registration

The proposals will be evaluated for professional registration. The respondent must include an ASPRS-recognized Certified Photogrammetrist and a Professional Land Surveyor licensed to practice in Indiana. ***The supervisory staff for this project must be located in the office where the majority of the work will be done.***

4.6) Business Registration

The respondent must be licensed to do business in the State of Indiana.

4.7) Proximity to the Project Area

While not a mandatory condition, it is recognized that there are advantages for MCCOG to select a Contractor within reasonable regional proximity. ***The location of the office where the work will be performed is more important than the location of the main office and other branch offices.*** No proposals will, however, be disqualified solely on the basis of this factor.

4.8) Subcontracting

MCCOG prefers that all work be performed by a single contractor. However, if the intent is to use subcontractors, please submit information about all subcontractors as part of this submission. No portion of the work to be awarded under this contract shall be sublet, assigned or otherwise disposed of, except with the written consent of MCCOG. ***No more than 20% of the work may be subcontracted.*** Consent to sublet, assign or otherwise dispose of any portion of the work awarded under this contract shall not be construed to relieve the Contractor of any responsibility for the fulfillment of this contract. A subcontractor shall not subcontract any portion of its work under this contract.

4.9) Off-Shore Labor

It is MCCOG's intent to have all work performed within the United States.

4.10) Firm Background

The proposal will be evaluated on the basis of the respondent's background, including the number of years in business, size, and financial stability.

4.11) Staff Qualifications

The proposal will be evaluated on the basis of the respondent's demonstrated staff qualifications, including the required professional registrations.

4.12) Local Project Experience

MCCOG prefers to select a contractor that can demonstrate successful project experience in the State of Indiana or at a minimum within the Midwest region.

4.13) Similar Project Experience

The proposal will be evaluated on the basis of project experience that is of a similar technical nature and complexity, for clients that are similar in size, location, and type as MCCOG.

4.14) Schedule and Availability

The respondent's projected schedule and resource availability will be evaluated in the choice of a contractor, although MCCOG understands that the actual beginning and completion dates are subject to the notice to proceed.

4.15) Qualifications Based Selection Format Criteria

4.15.a) Qualifications and Familiarity with the Project: knowledge of project scope, knowledge of ASPRS Requirements, familiarity with the Midwest; project goals; project partners; and knowledge of project regulations (35 points).

4.15.b) Technical Competence and Experience: demonstrated capacity on similar projects; familiarity with ASPRS and other professional associations, familiarity with aerial photography & photogrammetry; design/study integrity of past projects; knowledge of photogrammetry,

orthophoto development; ability to integrate GIS with project products; familiarity & experience with LiDAR & ability to integrate its use in future phases of project; perceptions of opportunities and limitations; and understanding of technical demands (35 points).

4.15.c) Capacity of Performance: organization and firm capacity; experience of project manager; experience of project team; project control and management; and the makeup of project team; coordination of various needs on project; ability to complete scope (15 points).

4.15.d) Methodology: demonstrated ability to complete work scope; and the ability to meet schedule timelines (10 points).

4.15.e) Firm location and Other: location of firm; prior experience within Midwest; and use of technology (5 points).

Section 5 - Proposal Format

All proposals must follow the same format. No exceptions to this format will be accepted. To be accepted for evaluation, the proposal format must address all required components in order.

The aim of the required format is to simplify the proposal preparation and evaluation processes and to ensure that all proposals receive the same orderly review.

All proposals must include the following components:

Section	Topic
	Cover Letter
1	Company Overview
2	Project Services
3	Project Team
4	Related Experience
5	Proposed Schedule
6	Additional Information
7	Flight Planning Map

Section 6 - Proposal Components

6.1) Cover Letter

Provide a one- or two-page cover letter. Include the original signed cover letter with the original proposal and a copy of the cover letter with each copy of the proposal.

The cover letter should provide the following:

- A brief statement of the respondent's understanding of the project
- The name, title, phone number, fax number, email address and street address of the person in the proposer's organization who will respond to questions about the proposal
- Highlights of the respondent's qualifications and ability to perform the project services

6.2) Section 1: Company Overview

Provide the following information about your firm:

- The firm's name, business address, phone number, and fax number
- The year the firm was established
- Former names of the firm, if applicable
- The type of ownership and parent company, if applicable
- The location of the office or offices that would provide the project services
- A brief statement of the firm's background, demonstrating longevity and financial stability

6.3) Section 2: Project Services

In this section, which is intended to be the heart of the proposal, describe the respondent's expertise with the methods, hardware, and software necessary to perform the project services described in Section 7 of this RFQ. Include information about the respondent's quality control program.

6.4) Section 3: Project Team

Start the section by introducing the designated project manager and the project team. Remember that the selection criteria in Section 4.5 require the proposed team to include an ASPRS-recognized Certified Photogrammetrist and a registered Professional Land Surveyor licensed in the State of Indiana. Include a project team organization chart.

List all proposed sub consultants, their DBE status, and the percentage of work to be performed by the lead consultant and each sub consultant. A listing of certified DBE's eligible to be considered for selection as prime consultants or sub-consultants for this RFQ can be found at the Indiana Department of Transportation's (INDOT) website. (http://www.in.gov/dot/div/legal/DBE/dbe_list.xls).

For each key person you would assign to the project, include a one- or two-page résumé that includes a summary of professional qualifications, relevant project experience, education, and professional registration. The maximum number of résumés is 10.

6.5) Section 4: Related Experience

For up to 3 relevant projects, include a one- or two-page project description that demonstrates similar capabilities in similar projects, for similar clients. Include the name of the client organization, the name of the person who can be contacted for reference, and the contact information for that person.

6.6) Section 5: Proposed Schedule

Include a brief schedule for the completion of the project services and the deliverables identified in Section 2 of your proposal. Include the proposed start and end dates. Describe your projected resource availability for the anticipated duration of the project.

6.7) Section 7: Additional Information

At your discretion, include additional information such as an equipment list and other information that supports your proposal. However, choose the additional information carefully, because this section of the proposal should not constitute the bulk of your submission.

6.8) Section 8: Flight Planning Map

All respondents are required to provide a flight-planning map at the time of SOQ submission. The flight plan shall show all pertinent data including, but not limited to, flight lines, project boundary, map scale, scale of photography etc.

Section 7 - Specifications

7.1) Existing Conditions

MCCOG successfully completed a digital orthoimagery update in 2003. The planimetric and topographic data was successfully completed in 2004. The following data will be made available to the selected contractor.

- Ground Control – In 2003, MCCOG utilized 53 horizontal and vertical ground control monuments evenly dispersed throughout the interior and perimeter of the project area.
- 3-D Hydrographic Features – Rivers, Lakes, Streams and Ponds, Dams, Headwalls, etc.
- Centerline of paved and unpaved roads, bridges, and railroads,
- Digital Terrain Model (DTM) – County wide DTM data consisting of breaklines and masspoints designed for generating 2-foot contours
- 2-foot Contours and Spot Elevations
- Digital color 1"=100' scale orthoimagery at 0.5-foot pixel resolution
- Existing Tile Grid – An ortho tile grid of the 2,500' x 2,500' tiles

The successful contractor, acting under the authority and approval of MCCOG, will provide the following professional services for the 2008 Project. Proposals must include description of the production process and the quality control measures to be included.

7.2) Aerial Imagery

To take advantage of modern photogrammetric technology, MCCOG requires the contractor to own and operate a digital camera system.

For digital imagery acquisition, the contractor must utilize a 12-bit all digital aerial sensor that requires no chemical film processing or scanning. The sensor must be a large format sensor that acquires stereo imagery.

In addition, the sensor needs to capture panchromatic and 4 bands of multispectral data: red, green, blue, and near infrared. The sensor must be equipped with GPS and inertial measurement unit (IMU) systems.

7.2.a) Aerial Image Acquisition

The contractor **must** acquire color digital imagery during spring 2008. The imagery will be used to produce digital orthophotography mapping and support the planimetric and topographic mapping.

7.2.b) Flying Height

The flying height must be at an appropriate altitude to produce the following:

- Digital orthoimagery at 1"=100' scale at 0.5-foot pixel resolution for the entire area. The contractor may resample from a smaller pixel resolution to achieve the 0.5-foot pixel resolution, but in no case shall the contractor resample from a larger pixel resolution to

- achieve the 0.5-foot pixel resolution.
- 1" = 100' scale Planimetric mapping.
- 2-foot contours at a 1.0 -foot vertical accuracy

7.2.c) Flight Plan

After the scope of services has been determined, a final flight plan will be designed by the selected contractor and approved by MCCOG.

7.2.d) Environmental Conditions

Aerial imagery should be obtained when the sky is sufficiently clear; the ground is sufficiently free from snow, haze, smoke, dust, and cloud shadows; rivers and streams are within their normal banks, and deciduous trees are sufficiently barren to permit the intended uses of the imagery. Spectral reflectance from water should be minimized and should not obscure shoreline features. In no case will the maximum cloud cover exceed 5% per image. The solar angle must be 30-degrees or more above the horizon at the time of exposure.

7.2.e) Aircraft and Crew Members

Aircraft must be maintained and operated in accordance with the regulations of the Federal Aviation Administration and the Civil Aeronautics Board.

7.2.f) Reflights

The contractor at no additional fee must correct aerial imagery that does not meet defined specifications. All re-flights must be centered on the plotted flight lines and must be taken with the same camera system.

7.3) Ground Control

MCCOG has established horizontal and vertical ground control points (see Attachment A).

7.3.a) Targeting

The selected contractor must schedule targeting for all horizontal and vertical photo control points with MCCOG based on the scheduled aerial photography. Targeting must occur **before** the aerial photography is acquired and be maintained until the photography is completed and accepted.

All target panels must be of appropriate size for the scale of photography and sufficiently light-reflectant to create a high contrast with the background. Targets must be secured with the center of the target over the station. Proposals should specify the target material, size, and shape to be used.

7.3.b) Horizontal and Vertical Control

The coordinate system will be based upon the Indiana State Plane Coordinate System, East Zone.

The horizontal datum used for this project will be the North American Datum (NAD 83) HARN expressed in International feet.

The vertical datum used for this survey will be North American Vertical Datum 1988 (NAVD88) expressed in U.S. Survey feet.

7.4) Photogrammetric Equipment Requirements

It is in MCCOG's interest that the contractor uses the most cost-effective technology while maintaining the required accuracy. The specific photogrammetric equipment to be used for Aerial Triangulation, Stereo Compilation and Digital Orthophotography production compilation must be specified in the proposal. The instruments used for production must be the same instruments identified in the proposal.

7.4.a) Aerial Triangulation (AT)

The contractor must use aerial triangulation (AT) techniques to extend and densify ground control for the production of digital orthophotography for 1"=100' scale mapping.

7.4.b) Mensuration

Mensuration must be done on equipment that is capable of one micron of intrinsic accuracy.

7.4.c) Software

The aerial triangulation solution should be calculated using industry-standard software packages. The solution must be achieved from a full bundle adjustment.

7.4.d) Horizontal and Vertical Control

All horizontal ground control positions computed by analytic triangulation must be in the Indiana State Plane Coordinate System (East Zone) referenced to NAD83. Vertical control must be referenced to NAVD88.

7.4.e) Quality Control

Throughout triangulation, numerous checks must be made to detect data and field control errors.

7.5) Photogrammetric Compilation

7.5.a) Planimetric Update

MCCOG will provide the 2003 Planimetric data to the selected contractor. The data being provided shall only be used for MCCOG's Planimetric update. The following Planimetric data will be updated for the political townships of Green, Fall Creek and Anderson (See Attachment C):

- Building Footprints
- Transportation: centerlines of paved and unpaved roads, Edge of Pavement
- Hydro Features: rivers, lakes, streams, ponds, swamps, dams, spillways, headwalls, culverts, large culvert pipes

The identified planimetric features must be updated from the aerial photography. The vector data must be snapped, joined, and concatenated to create continuous segments without over runs and gaps will allow for the compiled planimetric data to be implemented into MCCOG's GIS.

The hydrographic layer (rivers, lakes, streams, creeks, reservoirs, ponds and swamps) must be digitized in the direction of flow. When digitizing water features that are through or under roads, bridges, culverts or other structures, a hidden water line must be used to create a continuous

segment. When digitizing water bodies such as lakes and ponds, they must be enclosed as polygons. Where a stream or river enters and exits the water body, a hidden water line must be placed through the center of the polygon and joined to the adjacent stream or river. This hidden line will be in a separate layer so it can be displayed as needed. Rivers, streams, and creeks greater than 8 feet wide will be shown with both edges and an interpreted centerline.

Details of the planimetric update will be discussed during the scope negotiation.

7.5.b) LiDAR/DTM/Contours

MCCOG has existing DTM, 2-foot contour, and spot elevation data produced in the year 2003 using LiDAR and photogrammetric methods. For the 2008 project, MCCOG would like to obtain new LiDAR data for the political townships of Green, Fall Creek and Anderson (See Attachment C). The LiDAR data must meet the following specifications:

- Obtain new LiDAR data of the entire project area consisting of point number, X coordinate, Y coordinate, Z coordinate, along with an intensity value.
- Average post spacing of 2.0 meters
- Provide bare earth and non ground classified data in .LAS (compatible with *LAS Specification LAS 1.1*) format
- Provide bare earth classified data in .ESRI grid raster format
- Tile size -2,500 x 2,500

All work should be done in accordance with FEMA's *Guidelines and Specifications* for Flood Hazard Mapping Partners, dated April 2003. This includes a minimum of 20 quality control (QC) ground survey test points within each of 5 ground cover categories:

- Bare-earth and low grass
- High grass, weeds, and crops
- Brush lands and low trees
- Forested
- Urban

The following Topographic features will be updated:

- Mass Points: Use the LiDAR generated bare earth data
- Breaklines: Update or compile new breaklines.
- Contours: Produce new 2-foot contours and spot elevations.

7.5.c) Digital Orthophotography

MCCOG will provide the existing 2,500' x 2,500' tile layout covering the project area.

The contractor will produce 1" = 100' scale color digital orthoimagery at 0.5-foot pixel resolution.

The vendor must describe the production methods and quality control processes that will be used to meet the following specifications:

- One set of 1" = 100' scale natural color digital orthophotography with a 0.5-foot pixel resolution, to include 256 levels of value for each color band (red, green, and blue).

- Tile format must follow a modular layout, with each 1"=100' scale image covering 2,500' x 2,500'. Full tiles are required.
- Visible seams or sutures within a tile or between tiles, which exhibit a noticeable "edge" or "displacement" effect, will be grounds for rejection of that tile.
- The tile grid will be supplied by MCCOG (see Attachment B).

Section 8 – Possible Contract Options

8.1) Oblique Aerial View Imagery (OAV) – Possible Contract Option

As a supplement to traditional vertical orthoimagery, the county is requesting Color Oblique Aerial View Imagery of the entire project area.

The county is requesting four cardinal views of OAV imagery collected at 45 degrees, along with the vertical view at 0.5 foot pixel resolution. The OAV imagery must be ortho-rectified and geo-referenced to the Indiana State plane Coordinate System (East Zone).

8.1.a) Aircraft

The aircraft used for OAV must be equipped with airborne GPS, and an inertial measuring unit (IMU). The aircraft must be designed for aerial image acquisition.

8.1.b) Digital Aerial Camera

For OAV digital imagery acquisition, a single 12-bit all digital large format aerial sensor equipped with GPS and inertial measurement unit (IMU) that acquires the oblique view as well as the vertical view simultaneously, is required.

8.1.c) Image Processing

The OAV image processing, aerial triangulation, DEM, image rectification, and mosaicking is to be performed using photogrammetric industry methodologies and standards and supervised by a certified Photogrammetrist.

8.1.d) Aerial Triangulation

The contractor will employ softcopy aerial triangulation techniques for the extension and densification of ground control. The aerial triangulation is applicable to all four cardinal views.

8.1.e) Digital Elevation Model (DEM)

The new LiDAR derived DTM will be used for image rectification. The rectification is applicable to all four views.

8.1.f) Image Rectification

The contractor must use exponential interpolation algorithms for the rectification process. In contrast to nearest-neighbor interpolation, cubic convolution or bilinear interpolation, the exponential interpolation process provides both high accuracy and superior image quality. This is applicable to all four cardinal views.

8.1.g) Image Mosaicking

Inter-active mosaicking must be performed to create one seamless image covering the project area for each of the four views.

8.1.h) Image Format

The OAV imagery will be in GEOTIFF format along with a MrSID data set at a 20:1 compression ratio.

8.1.i) Accuracy

The OAV imagery produced for this project shall be consistent across the County's entire project area, and will meet the specifications of the county's GIS system. The imagery will meet the following accuracies.

- The oblique view 0.5-foot imagery will have accuracy within 10 pixels of the vertical view.

8.1.j) Professional Registration

The county is requiring all four views of the oblique Aerial View Imagery and the vertical view imagery to be geo-referenced and orthorectified using photogrammetric industry standard methodologies. This will allow accurate measurements to be derived from the orthoimagery. Orthoimagery is considered both a photograph and a map. Therefore, the contractor must have on staff an ASPRS Certified Photogrammetrist (CP) who will be responsible for the OAV project.

8.1.k) Viewing Application

The contractor will provide an extension to ESRI ArcGIS 9.2 to view the oblique aerial view imagery. The extension should be able to perform the following:

Easily view the imagery without the need to learn software
Pan, zoom, and change view angle with one button ease
Overlay GIS data layers
Copy and print

8.2) City of Anderson 0.25' Resolution Digital Orthophotography – Possible Contract Option

Digital Orthophotography at 1" = 100' scale at 0.25-foot pixel resolution for the incorporated area of the City of Anderson outlined in Attachment C.

The vendor must describe the production methods and quality control processes that will be used to meet the following specifications:

- One set of 1" = 100' scale natural color digital orthophotography with a 0.25-foot pixel resolution, to include 256 levels of value for each color band (red, green, and blue).
- Visible seams or sutures within a tile or between tiles, which exhibit a noticeable "edge" or "displacement" effect, will be grounds for rejection of that tile.

8.3) MCOG MPA 0.25' Resolution Digital Orthophotography – Possible Contract Option

Digital Orthophotography at 1" = 100' scale at 0.25-foot pixel resolution for the entire MCOG MPA outlined in Attachment C.

The vendor must describe the production methods and quality control processes that will be used to meet the following specifications:

- One set of 1" = 100' scale natural color digital orthophotography with a 0.25-foot pixel resolution, to include 256 levels of value for each color band (red, green, and blue).
- Visible seams or sutures within a tile or between tiles, which exhibit a noticeable "edge" or "displacement" effect, will be grounds for rejection of that tile.

Metadata

The contractor shall provide metadata compiled to the current standard endorsed by the Federal Geographic Data Committee (FGDC) for each of the data deliverables. Currently, this is the Content Standard for Digital Geospatial Metadata Version 2 (FGDC-STD-001-1998).

Summary of Deliverables

- One hard copy of the Project Plan and one electronic copy of the report in PDF file format
- One hard copy of the Aerial Image Acquisition flight plan and control diagram, and one digital copy in shape file format
- One hard copy of the LiDAR Acquisition flight plan and control diagram, and one digital copy in shape file format
- One hard copy of the Ground Control Report and one electronic copy of the report in the PDF file format.
- One hard copy of the Aerial Image Acquisition Report and one electronic copy of the report in the PDF file format.
- One hard copy of the LiDAR Report and one electronic copy of the report in the PDF file format.
- One set of the of the "bare earth" and a "non ground" LiDAR data in LAS format
- Provide bare earth classified LiDAR data in .ESRI grid raster format
- One set of DTM data (mass points and breaklines) in GeoDatabase format
- One set of 2-foot contours and spot elevations in GeoDatabase format
- One set of Planimetric data (Hydro, Transportation & Building features) in GeoDatabase format
- One set of 1" = 100' scale color digital ortho imagery at 0.5-foot pixel resolution for each 2,500' X 2,500' ortho tile in GeoTIFF format.
- One set of 1" = 100' scale color digital ortho imagery at 0.5-foot pixel resolution for each 2,500' X 2,500' ortho tile in MrSID 20:1 compression format (after final acceptance).
- Four Cardinal views of oblique aerial view imagery at 0.5-foot pixel resolution in GeoTIFF and MrSID format (should MCCOG select this option)
- ESRI viewing application extension for oblique aerial view imagery (should this option be selected)
- One set of 1" = 100' scale color digital orthophotography with a 0.25-foot pixel resolution for the City of Anderson(should this option be selected)
- One set of 1" = 100' scale color digital orthophotography with a 0.25-foot pixel resolution for the City of Anderson(should this option be selected)
- Metadata

Planimetric, Topographic, and Digital orthophotography produced for this project shall be consistent across MCCOG's entire project area and meet or exceed the required National Map Accuracy Standards for 1"=100' scale mapping. The 2-foot contours must have a vertical accuracy of 1.0-feet

All products and services produced for this project become the sole property of Madison County and cannot be used or reproduced without written permission. Madison County has the right to grant or deny any request.

Attachment A: Control Points

Please see the enclosed CD or http://www.mccog.net/download_center.htm for Attachment A. Attachment A consists of an ESRI shapefile of the existing control points. Also included are .pdf documents of the field notes for each control point.

Attachment B: Tile Grid

Please see the enclosed CD or http://www.mccog.net/download_center.htm for Attachment B. Attachment B consists of an ESRI shapefile of the MCCOG tile grid.

Attachment C: Project Areas

Please see the enclosed CD or http://www.mccog.net/download_center.htm for Attachment C. Attachment C consists of ESRI shapefiles including: Anderson Ortho Area, MCCOG MPA Boundary and the political townships for planimetric/LiDAR/contour update.

If you experience problems with accessing the Attachments please contact Trent Pell immediately at 765-641-9482 or tpell@mccog.net.